

January 10, 2012

Ms. Debra Howland Executive Director and Secretary State of New Hampshire Public Utilities Commission 21 S. Fruit St, Suite 10 Concord, NH 03301-2429

Dear Ms. Howland,



Please find attached two applications for the Washington Electric Cooperative for registration of its landfill gas generators in the RPS markets in New Hampshire. The first application is for NH Class I registration and the second application is for NH Class III registration. If you have any questions feel free to contact me at 802-861-1617. We look forward to your review and consideration of these generation projects for eligibility in the NH RPS markets.

Best regards,

Patricia Richards
Senior Consultant

Contact Information

Patricia Richards, Senior Consultant

La Capra Associates, Inc. 277 Blair Park Road, Suite 210 Williston, VT 05495

Tel: 802-861-1617

E-mail: prichard@lacapra.com

STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

SAMPLE APPLICATION FORM

FOR RENEWABLE ENERGY SOURCE ELIGIBILITY

Pursuant to New Hampshire Admin. Code Puc 2500 Rules

NOTE: When completing this application electronically, using the "tab" key after completing each answer will move the cursor to the next blank to be filled in. If a question is not applicable to your facility, then check the box next to N/A.

Pursuant to Puc 202, the signed application shall be filed with the Executive Director and Secretary of the New Hampshire Public Utilities Commission (Commission). To ensure that your submitted application is complete, please read RSA 362-F and N.H. Code Admin. Rules Puc 2500 before filling out this application. It is the burden of the applicant to provide timely, accurate and complete information as part of the application process. Any failure by the applicant to provide information in a timely manner may result in the Commission dismissing this application without prejudice.

1.	ELIGIBILIT	Y	CLASS APPLIED FOR:			xxIII	☐ IV
2.	Applicant's legal na	me:	Washington Electric Coopeartive, Inc.				418/19/19
3.	Address:	(1)	PO Box 8		- Porton and a second		
		(2)	VT Route 14N			14-14-14-14-14-14-14-14-14-14-14-14-14-1	WY TO SELECT
		(3)					
			East Montpelier (City)	VT (State)	05651 (Zip co	ode)
4.	Telephone number:		802-223-5245				***************************************
5.	Facsimile number:		802-223-6780				***************************************
6.	Email address:		avram@washingtonelectric.coop		***************************************		
7.	Facility name:		Coventry Clean Energy		=======================================		
8.	Facility location:	(1)	21 Landfill Lane				

	(2)
	Coventry VT 05855
	(City) (State) (Zip code)
9.	Latitude:
10.	The name and telephone number of the facility's operator, if different from the owner: Same
	(Name) (Telephone number)
11.	The ISO-New England asset identification number, if applicable: 10,801 or N/A:
12.	The GIS facility code, if applicable: MSS10801 or N/A:
13.	A description of the facility, including fuel type, gross nameplate generation capacity, the initial commercial operation date, and the date it began operation, if different.
14.	 If Class I certification is sought for a generation facility that uses biomass, the applicant shall submit: (a) quarterly average NOx emission rates over the past rolling year, (b) the most recent average particulate matter emission rates as required by the New Hampshire Department of Environmental Services (NHDES), (c) a description of the pollution control equipment or proposed practices for compliance with such requirements, (d) proof that a copy of the completed application has been filed with the NHDES, and (e) conduct a stack test to verify compliance with the emission standard for particulate matter no later than 12 months prior to the end of the subject calendar quarter except as provided for in RSA 362-F:12, II. (f) xx N/A: Class I certification is NOT being sought for a generation facility that uses biomass.
15.	If Class I certification is sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies to produce energy, the applicant shall: (a) demonstrate that it has made capital investments after January 1, 2006 with the successful purpose of improving the efficiency or increasing the output of renewable energy from the facility, and (b) supply the historical generation baseline as defined in RSA 362-F:2, X. (c) xx N/A: Class I certification is NOT being sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies.
16.	If Class I certification is sought for repowered Class III or Class IV sources, the applicant shall: (a) demonstrate that it has made new capital investments for the purpose of restoring unusable generation capacity or adding to the existing capacity, in light of the NHDES environmental permitting requirements or otherwise, and

- (b) provide documentation that eighty percent of its tax basis in the resulting plant and equipment of the eligible generation capacity, including the NHDES permitting requirements for new plants, but exclusive of any tax basis in real property and intangible assets, is derived from the new capital investments.
- (c) xx N/A: Class I certification is NOT being sought for repowered Class III or Class IV sources.
- 17. If Class I certification is sought for formerly nonrenewable energy electric generation facilities, the applicant shall:
 - (a) demonstrate that it has made new capital investments for the purpose of repowering with eligible biomass technologies or methane gas and complies with the certification requirements of Puc 2505.04, if using biomass fuels, and
 - (b) provide documentation that eighty percent of its tax basis in the resulting generation unit, including NHDES permitting requirements for new plants, but exclusive of any tax basis in real property and intangible assets, is derived from the new capital investments.
 - (c) xx N/A: Class I certification is NOT being sought for formerly nonrenewable energy electric generation facilities.
- 18. If Class IV certification is sought for an existing small hydroelectric facility, the applicant shall submit proof that:
 - (a) it has installed upstream and downstream diadromous fish passages that have been required and approved under the terms of its license or exemption from the Federal Energy Regulatory Commission, and
 - (b) when required, has documented applicable state water quality certification pursuant to section 401 of the Clean Water Act for hydroelectric projects.
 - (c) xx N/A: Class IV certification is NOT being sought for existing small hydroelectric facilities.
- 19. If the source is located in a control area adjacent to the New England control area, the applicant shall submit proof that the energy is delivered within the New England control area and such delivery is verified using the documentation required in Puc 2504.01(a)(2) a. to e.
- 20. All other necessary regulatory approvals, including any reviews, approvals or permits required by the NHDES or the environmental protection agency in the facility's state.
- 21. Proof that the applicant either has an approved interconnection study on file with the commission, is a party to a currently effective interconnection agreement, or is otherwise not required to undertake an interconnection study.
- 22. A description of how the generation facility is connected to the regional power pool of the local electric distribution utility.
- 23. A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof.
- 24. A statement as to whether the facility's output has been verified by ISO-New England.

- 25. A description of how the facility's output is reported to the GIS if not verified by ISO-New England.
- 26. An affidavit by the owner attesting to the accuracy of the contents of the application.
- 27. Such other information as the applicant wishes to provide to assist in classification of the generating facility.
- 28. This application and all future correspondence should be sent to:

Ms. Debra A. Howland Executive Director and Secretary State of New Hampshire Public Utilities Commission 21 S. Fruit St, Suite 10 Concord, NH 03301-2429

29. Preparer's information:

	Name:	Patricia H Richards	Phone:	802-861-	1617			
	Title:	Senior Consultant			- Million Control	318-744-44-44	AUGUSTA -	
	Address: (1)	La Capra Assoicates						
	(2)	277 Blair Park		P. 4774 14.444.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4	***************************************			
	(3)	Suite 210				1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1		
		Williston (City)		V	(State)	05495	Zip code)	
30.	Preparer's signature:	Tolum Water			(State)	(Zip code)	

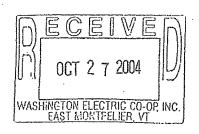
New Hampshire REC Market Application - Coventry Clean Energy (Asset ID 10801)

Questions from Application:

- 13. Description of the facility Washington Electric Cooperative built a landfill gas burning generation facility and commenced operations in July, 2005. The original facility included three Caterpillar engine-generator sets each rated at 1,600 kW for a total installed gross generating capacity of 4.8 MW.
- 14. NA
- 15. NA
- 16. NA
- 17. NA
- 18. NA
- 19. NA Unit is located within the New England control area
- 20. Vermont Certificate of Public Good Attached
- 21. Interconnection Study VELCO analyzed the impact of the facility connecting to their system and the grid. The details of their study were filed as part of the facility receiving a permit from the state of Vermont. See the following attached files for details:
 - a. Transmission Analysis LaForest Prefiled FINAL.pdf
 - b. Transmission Analysis DLL Exhibits.pdf
- 22. Description of the interconnected to regional power grid The project is connected to the WEC Irasburg transmission line which then connects to VELCO. There is a substation located at the landfill which consists of three major components. The first component is a 4.16 kV-46 kV step-up substation. This consists of a 4.16 kV generation bus where the output of the generators is connected. The output will then be stepped up to 46 kV through a 4.16 kV-46 kV transformer. Finally, a 46 kV circuit breaker is provide for protection to the substation. The second major component of the interconnection is a 46 kV line from the landfill to the VELCO Irasburg Substation. This line is 7.4 miles long. The final component of the interconnection is the 46 kV circuit breaker and metering at the VELCO Irasburg Substation. The breaker is necessary to provide protection for line faults and the metering for measurement of the net output of the generators. The project is connected to the regional power grid at this substation in Irasburg.
- 23. MA and RI Class 1 Certified Attached
- 24. The output of the facility is settled in the ISO-NE market systems and is therefore verified through the ISO-NE market system. All output is currently being reported in the NEPOOL GIS system
- 25. NA
- 26. See attached affidavit from Avram Patt, WEC General Manager

27. The project is already Massachusetts and Rhode Island Class 1 certified and is therefore registered in the NEPOOL GIS system. Washington Electric Cooperative is currently seeking application in the New Hampshire renewable markets in an effort to expand its ability to sell RECs to interested parties/utilities in New Hampshire.

STATE OF VERMONT PUBLIC SERVICE BOARD



Docket No. 6925

Joint Petition by Washington Electric Cooperative,
Inc. ("WEC"), Vermont Electric Power Company,
Inc. ("VELCO"), Citizens Communications
Company ("CZN"), and Vermont Electric
Cooperative, Inc. ("VEC") for a certificate of public
good, pursuant to 30 V.S.A. Section 248,
authorizing: (1) WEC to construct an electric
generation station in Coventry, Vermont; (2) WEC
and VELCO to make improvements to the Irasburg
substation; and (3) WEC, VEC and CZN to construct
46 kV transmission lines in Coventry and Irasburg,
Vermont, including provisions for distribution
system construction by CZN and VEC

Order entered: 10/21/2004

ORDER RE WASHINGTON ELECTRIC COOPERATIVE'S MOTION TO ALLOW LIMITED CONSTRUCTION PRIOR TO RECEIPT OF THE NECESSARY ACT 250 PERMIT

I. Introduction

On June 4, 2004, the Vermont Public Service Board ("Board") issued an Order and Certificate of Public Good ("CPG") in this Docket approving the construction of the Coventry landfill gas generation project ("Project") proposed by Washington Electric Cooperative, Inc. ("WEC"). The Order adopts a Stipulation signed by all parties to the Docket and filed with the Board on May 19, 2004. The Stipulation requires that WEC not commence construction on the Project until an Act 250 permit has been issued approving Casella Waste Management's proposed expansion of the Coventry landfill. The economic feasibility of the Project is dependent on the expansion of the landfill.

On September 2, 2004, WEC filed a motion requesting that the Board modify the CPG issued in this Docket, to allow construction prior to the issuance of the required Act 250 Permit.

Docket No. 6925 Page 2

The Board, in an Order dated September 20, 2004, denied WEC's request on the grounds that construction prior to issuance of the necessary Act 250 permit introduced a new material risk, the possibility of an estimated \$1.35 million in stranded costs.

On October 20, 2004, WEC filed a second, and substantially different, motion requesting permission to commence construction prior to the issuance of the necessary Act 250 permit. The motion indicated that the Vermont Department of Public Service and the Vermont Agency of Natural Resources do not oppose WEC's motion. In this Order we grant WEC's October 20 motion, for the reasons set forth below.

II. DISCUSSION AND CONCLUSION

This motion differs WEC's September 2 filing in two significant ways. First, WEC is now seeking permission to perform only limited construction work on the approved generation facility, prior to the issuance of the necessary Act 250 permit. The work would be limited to construction of the foundation for the facility. Second, the Cooperative's members will no longer be exposed to a risk of significant stranded costs (an estimated \$1.35 million) if the Project does not proceed. WEC now estimates that the cost of constructing the foundation alone is approximately \$275,000.

WEC's October 20 filing indicates that Gordon Deane, WEC's project consultant, has agreed to assume the stranded cost risk of the limited construction requested by WEC. Under this arrangement, Mr. Deane will provide WEC with a non-recourse bridge loan for the \$275,000 needed to construct the foundation. If the necessary Act 250 permit is not issued, WEC and its members will owe nothing.² If the necessary Act 250 permit is issued, WEC pays a financing fee to Mr. Deane of 10% of the guarantee needed for the construction (\$275,000), plus one percent a month for any outstanding balance of the monies actually lent by Mr. Deane for the project. The

^{1.} October 20 Motion at 4.

^{2.} In the event that the Act 250 permit is not issued by January 1, 2005, the agreement requires WEC to utilize its best efforts to provide security for the expended monies against any assets it may have relating to the Coventry Project; e.g., an assignment of the CCEC contracts. Mr. Deane will have the ability to foreclose on these assigned assets if WEC decides not to go forward with the Project or if the necessary permit is not issued by July 1, 2005.

Docket No. 6925 Page 3

total estimated cost of this hedging arrangement is estimated by WEC at \$29,500.³ The cost for this financial hedging arrangement is comparable to the increased cost of winter construction of the foundation (estimated by WEC at approximately \$30,000) that WEC would face if commencement of construction was deferred by several more weeks.⁴ Additionally, this hedging fee is nominal in light of the \$7.32 million overall cost⁵ of the Coventry Project.

WEC's October 20 motion differs significantly from its prior request to commence construction in one important aspect: WEC's members would not be liable for the risks of any stranded costs that may result if WEC commences construction prior to the issuance of the necessary Act 250 permit. It was concern for the effects of this potential \$1.35 million stranded costs on WEC's members that led us to deny WEC's September 2 Motion. WEC has sufficiently addressed this concern and we therefore grant WEC's motion to allow construction of the foundation of the Coventry generation facility prior to the issuance of the necessary Act 250 permit. We have some concern, however, about the possibility of Mr. Deane foreclosing on certain assets if the necessary Act 250 permit is not issued by July 1, 2005, or WEC decides not to go forward with the Project. Consequently, we require WEC to inform the Board, in writing (1) when the Act 250 permit is issued; and (2) when it has fully satisfied its financial obligation to Mr. Deane under the terms of their agreement. If, as of May 1, 2005, WEC has, for any reason, an outstanding obligation to Mr. Deane under this agreement, WEC must notify the Board and provide a detailed explanation of its intentions with respect to the Project, including its outstanding obligations to Mr. Deane.

SO ORDERED.

^{3.} October 20 Motion at 8.

^{4.} October 20 Motion at 5.

^{5.} Docket 6925, Order of 6/4/04 at 12.

Dated at Montpelier, Vermont, this <u>21st</u> day of <u>October</u>	, 2004.
s/Michael H. Dworkin)	PUBLIC SERVICE
s/David C. Coen)	Board
s/John D. Burke	OF VERMONT

A true copy:

OFFICE OF THE CLERK

FILED: October 21, 2004

ATTEST: Guslith C. M

Acting Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: Clerk@psb.state.vt.us)

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 1 of 15

STATE OF VERMONT PUBLIC SERVICE BOARD

Docket No. 6925

Joint Petition by Washington Electric Cooperative,)
Inc. ("WEC"), Vermont Electric Power Company,)
Inc. ("VELCO"), Citizens Communications)
Corporation ("CZN"), and Vermont Electric)
Cooperative, Inc. ("VEC") for a Certificate of)
Public Good pursuant to 30 V.S.A. § 248)
authorizing: (1) WEC to construct an electric)
generation station in Coventry, Vermont,)
(2) WEC & VELCO to make improvements to)
the Irasburg substation, (3) WEC, VEC & CZN)
to construct 46 KV transmission lines in Coventry)
and Irasburg, Vermont, including provisions for)
distribution system construction by CZN and)
VEC.)

PRE-FILED TESTIMONY OF DEAN L. LaFOREST

ON BEHALF OF VERMONT ELECTRIC POWER COMPANY, INC. (VELCO)

Mr. LaForest testifies to studies conducted by Velco to examine how the proposed generation would impact system operations and performance of the electric network.

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 2 of 15

STATE OF VERMONT PUBLIC SERVICE BOARD

Docket No. 6925

Joint Petition by Washington Electric Cooperative,)
Inc. ("WEC"), Vermont Electric Power Company,)
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to construct 46 KV transmission lines in Coventry)
and Irasburg, Vermont, including provisions for)
distribution system construction by CZN and)
VEC.)

PRE-FILED TESTIMONY OF DEAN L. LaFOREST

ON BEHALF OF VERMONT ELECTRIC POWER COMPANY, INC. (VELCO)

- 1 Q1. Please state your name and address and identify by whom you are employed.
- 2 A1. My name is Dean L. LaForest. My business address is Vermont Electric Power
- 3 Company, Inc., 366 Pinnacle Ridge Road, Rutland, VT 05701. I am an electrical
- 4 engineer employed as a senior planning engineer at Vermont Electric Power Company
- 5 (VELCO). I have special training and experience in the areas of transmission planning

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 3 of 15

1		and the modeling of power systems. My complete resume appears as Exhibit
2		VELCO_DLL-1.
3		
4	Q2.	What is your interest in this hearing?
5		
6	A2.	I am an employee of the VELCO, and will be testifying on its behalf.
7		
8	Q3.	Have you ever testified before the Vermont Public Service Board before?
9	A3.	I have provided testimony on the behalf of VELCO in three dockets before the board. I
10		provided testimony before the board on docket 6252 on the Essex STATCOM, docket
11		6792 on the Northern Loop and under docket number 6860, the Northwest Reliability
12		Project.
13		
14	Q4.	What is the nature of your testimony?
15	A4.	My testimony will describe the analytical studies performed by the System Planning
16		Department at VELCO for the WEC Coventry generation project. These studies
17		examined the performance of the network local to the proposed project and examined
18		how the proposed generation would impact system operations and performance before
19		and after the completion of VELCO's Northern Loop project. This examination was

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 4 of 15

made because the expected in-service date of the WEC Coventry project (early 2005) may precede completion of the VELCO's Northern Loop project (mid to late 2005).

A5.

Q5. Could you please summarize the analyses performed by VELCO for the WEC

Coventry project?

VELCO performed four sets of analyses to examine the impact of the project at 4 MW of output. These analyses included a load flow analysis to determine the impact of the project on local thermal and voltage performance of the network, a loss analysis to determine the change in Vermont and New England losses due to the project for a variety of load and system conditions, a short circuit impact analysis to determine if the additional short circuit strength introduced by the project might overduty any local equipment, and finally a cursory stability analysis to determine if local faults might cause the project's generators to lose synchronism, necessitating relaying to safely disconnect the plant from the network in this event. VELCO also researched historic data for flow trends on key local transmission and subtransmission circuits.

VELCO did not examine the impact of the plant at an output above 4 MW. ISO-NE would require a system impact study of the project should it increase its output above 5 MW.

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2 Q6. Could you please briefly describe the local network the project will interconnect with and its operational aspects? A6. The WEC Coventry project will interconnect 4 MW of generation radially into the VELCO Irasburg 46 kV substation. The Irasburg substation is connected via a 115/46 kV transformer to the VELCO 115 kV network. Today this 115 kV network extends radially down to VELCO's St. Johnsbury substation and then onto the Public Service of New Hampshire (PSNH) Littleton substation. In addition the Irasburg substation has a normally closed connection with the CVPS Lowell 46 kV station, which, in turn, connects to CV's Lowell – Johnson 34.5 kV line via a 46 to 34.5 kV transformer. The Irasburg 46 kV substation has two normally open lines, one southeast to Barton and another north to Newport. Please refer to Exhibit VELCO DLL-2 for a geographic map showing the stations and lines described above. Exhibit VELCO DLL-2a shows the same geographic area with portions of VELCO's Northern Loop highlighted. Exhibit VELCO DLL3 is a VELCO system one-line that shows, in its upper right hand corner, the Irasburg and St. Johnsbury substations as they exist today. The CVPS Johnson – Lowell 34.5 kV line was built in the late 1950s. VELCO's Littleton – St. Johnsbury 115 kV line was built in 1970, and then extended to Irasburg in

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 6 of 15

1973. The CVPS Lowell – Irasburg 46 kV line was also completed in 1973.

Today the VELCO St. Johnsbury station is fed normally from Littleton. The direction of flow at Irasburg is dependent on a variety of system conditions and factors, including load level, Vermont hydro generation level, Comerford Phase I use, the level of generation at the Comerford / Moore hydro power plants, and the status of key local lines. Due to the relative weakness of the local transmission system and the lack of large power sources locally, there are no existing thermal problems on the VELCO 115 kV transmission network local to the WEC Coventry project.

However, one local subtransmission path potentially can suffer overloads given the right set of coincident conditions. That path includes the CVPS Lowell 46 / 34.5 kV transformer (summer rated at 15/20 MVA) and the Lowell – Johnson 34.5 kV line, which has a 22 MVA summer rating and a 29 MVA winter rating (based on its 4/0 ACSR conductor). For reference, please examine Exhibit VELCO_DLL-4. This exhibit shows the seasonal flow duration, in MW, on the Lowell – Johnson 34.5 kV line from 1999 through 2003.

Q7. Could you describe in more detail any local transmission or subtransmission

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 7 of 15

thermal or voltage problems?

A7.

There are currently two problems faced by the local transmission / subtransmission network. The first is that the current transmission / subtransmission network cannot support local load (at St. Johnsbury) for loss of the St. Johnsbury – Littleton 115 kV line section. The other potential problem is that the Lowell 46/34.5 kV transformer and the Lowell – Johnson 34.5 kV line can become overloaded for a certain combination of system conditions.

The former problem was described and examined at length in the studies for the Northern Loop project. At current peak load levels the Northern Loop project allows loss of the St. Johnsbury – Littleton 115 kV with the ability to supply St. Johnsbury load. For the latter problem, the exposure in actual system operation has been small but present nonetheless.

Examination of Exhibit VELCO_DLL-4 shows seasonal flow duration curves for the Lowell – Johnson 34.5 kV line from 1999 to 2003. The graphs show a trend with increased positive flow (from the 115 kV system into the 46 / 34.5 kV) as time passes. The highest recorded seasonal hourly flows on the lines were 17.8 / 23.1 MW (summer /

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 8 of 15

1 winter) in 2003. The outage that would result in the highest flow on the Lowell – 2 Johnson corridor given the current network is loss of the F-206 line (Granite to 3 Comerford 230 kV). 4 5 **Q8.** What is the impact of the WEC Coventry project on these local network issues? 6 A8. Our studies have determined that the plant is not large enough to eliminate the supply 7 concern for the St. Johnsbury area load for loss of the Littleton source at high load levels. 8 In addition, the project slightly increases flow from Lowell to Johnson when on-line, and 9 this fact tends to exacerbate any overloads that might occur. I have documented these 10 facts with data in three exhibits. 11 12 Exhibit VELCO DLL-5 shows the potential flows on the Lowell – Johnson corridor in 13 the summer months (April through September) and winter months of 2003 if the F-206 14 line were lost. Assuming all other lines in-service, about 6% of the Comerford to Granite 15 flow is redirected to the Lowell – Johnson path for loss of the F-206 line. The exhibit 16 shows these postulated flows, as well as the increase caused by the Coventry project. 17 Two graphs have been included; the top graph shows the whole range of values for 2003 18 while the bottom graph focuses on the few hours with the highest estimated post-19 contingency flows (essentially the bottom graph highlights the left edge of the top graph).

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Examination of the exhibit shows that there were a limited number of hours of exposure given 2003 system conditions. The project increases the potential exposure from 5 summer hours to 13 based on data and the estimated impact of the WEC project. The estimate was made based on the assumed 22 MVA rating limit of the CVPS Johnson – Lowell 34.5 kV line and the intersection 22 MVA rating limit with the red ("sum 03-post-H14 MW") and green ("summer impact of WEC unit") curves in the lower graph in Exhibit VELCO_DLL-7.

Fortunately, the VELCO Northern Loop project redistributes local flows such that for similar system conditions, no overloads are expected given identical system conditions. This is best shown by Exhibit VELCO_DLL-6. This table is a compilation of all the thermally overloaded lines in the local area identified in the load flow analyses performed by VELCO for the WEC Coventry project. The analyses examined 21 relevant outages with the potential for local impact on 48 load flow databases. The databases examined various combinations of the Vermont summer load level (peak, 90% of peak and 78% of peak), Highgate use (importing 200 MW or off), McNeil use (on at 50 MW or off), Northern Loop status (in or out of service) and the WEC Coventry project (in or out of service).

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 10 of 15

Exhibit VELCO DLL-6 notes overloads in one or more of the 48 cases on up to four local transmission or subtransmission facilities. These included CVPS facilities (Lowell 46/34.5 kV transformer and the Lowell – Johnson 34.5 kV line), GMP facilities (Danville - Marshfield 34.5 kV line) and VELCO facilities (Granite - Barre 115 kV line). The only facilities to show an adverse impact with the WEC Coventry project were the CV facilities (Lowell transformer and line). The GMP Marshfield – Danville 34.5 kV line showed no significant impact and the Granite – Barre line showed a small positive impact. The exhibit further shows that with the VELCO Northern Loop project in-service (the Northern Loop project is denoted with an "NL" in the table) all of the overloads are removed from the CVPS facilities. Given the WEC Coventry project's assumed inservice date of early 2005 and the Northern Loop's assumed in-service date of mid to late 2005, there should be limited exposure to the overloads noted in this exhibit. In addition, Exhibit VELCO DLL-5 suggests that there has been very limited exposure to this potential overload (Lowell to Johnson) historically (5 hours out of 8760 in 2003.) Further research indicated the exposure experienced in 2003 was due to the Phase I DC converter at Comerford importing heavily on August 3. Phase I, historically, rarely is used to import power. The overloads noted in Exhibit VELCO DLL-6 occurred when

the Highgate DC converter was off at the tested peak to intermediate load levels. So far,

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Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 11 of 15

1 this set of conditions (Highgate off at intermediate to peak load levels) has also been a 2 rare occurrence. 3 4 Q9. What were the project's impacts on local short circuit levels? 5 A9. VELCO's Protection Department used the short circuit system model developed for the 6 Northern Loop project as a basis for this analysis. Exhibit VELCO DLL-7 shows the 7 tabulated impacts of the WEC project after completion of the Northern Loop project at 8 various local stations. The impacts required no additional equipment to be replaced. 9 10 O10. What were the project's impacts on local stability performance? 11 A10. The project's stability performance was tested against a standard stability database (with 12 load set at 45% of peak and maximum local generation on-line) against a design criteria 13 fault (a 115 kV breaker failure at the Irasburg substation for a three phase fault applied at 14 the Irasburg end of the Irasburg – St. Johnsbury 115 kV line). 15 16 The stability analysis performed was cursory for two reasons. The main reason for the 17 cursory stability analysis is that there are currently no other local machines that might 18 have stability interactions with the WEC project. The analysis merely had to determine if 19 the plant lost synchronism with the system for the worst, credible local fault. The second

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 12 of 15

reason why the stability analysis performed was cursory was that WEC and their consultants have not yet made a final choice on the generators that they will purchase and install. Without having made the choice, WEC could not provide the detailed data requested by VELCO for the completion of the stability analysis. Using engineering judgment, representative data was provided by VELCO to complete the stability analysis. For the previously identified test fault, the WEC project's generators lost synchronism with the power system. Until the units were tripped manually in the simulation they caused 40 to 45% voltage dips at the Irasburg 46 kV station (and would cause the same dip for any CZA load connected to the station) and caused 35 to 40% voltage dips for VEC's Lowell customers. The impact on voltage at these stations and others is noted in Exhibit VELCO DLL-8. The exhibit shows voltage in per unit at six selected stations for the 10-second simulation. The fault test was not applied until 1 second into the simulation. The breaker failure clearing time at Irasburg was assumed to be 15 cycles. The WEC units were allowed to slip poles and remain out of synchronism until the 5 second time in the simulation, when they were tripped manually to see if they caused other local units to lose synchronism (no other units did lose synchronism for this fault). The Irasburg 46 kV station voltage is denoted by the solid line with the circle symbol (O). The Lowell 34.5 kV voltage is denoted by the line with long dashes and the plus symbol

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Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 13 of 15

(+).1 2 3 As a result, VELCO strongly suggests that the project include relaying to address this 4 potential problem. Loss of synchronism by a generator for a fault can be detected by out 5 of step relaying which would in turn trip at least the generator's main breaker thereby 6 removing the unit from the network. 7 8 What were the project's impacts on system losses? 9 A11. Generally the WEC Coventry project has a small beneficial impact on system losses when 10 New England is considered as a whole. The project's impact on Vermont losses is 11 minimal and varies from a small adverse to a small beneficial impact. Both of these 12 conclusions are based on the results of a comparative loss analysis documented in Exhibit 13 VELCO DLL-9. 14 15 This exhibit documents Vermont losses and New England losses (without Vermont) for a 16 set of load flow cases without and with the WEC Coventry project. When placed on-line, 17 the WEC units were redispatched against generation in southeastern New England. The 18 change in Vermont, New England without Vermont, and total New England losses is 19 shown in the three right-hand most columns in the exhibit.

Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 14 of 15

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A12.

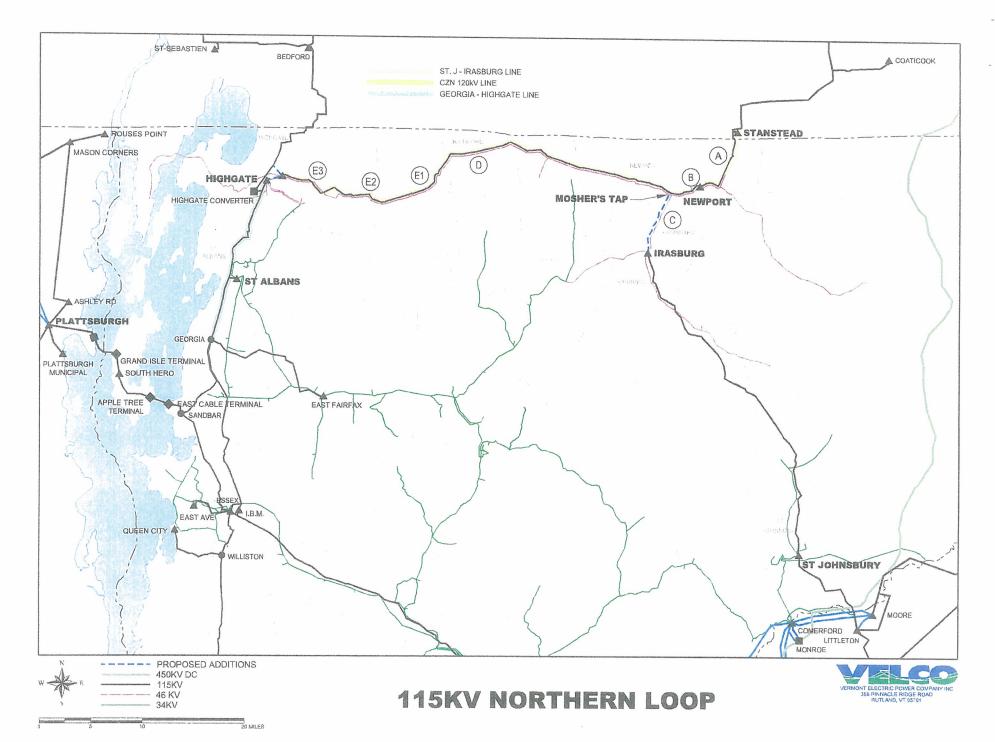
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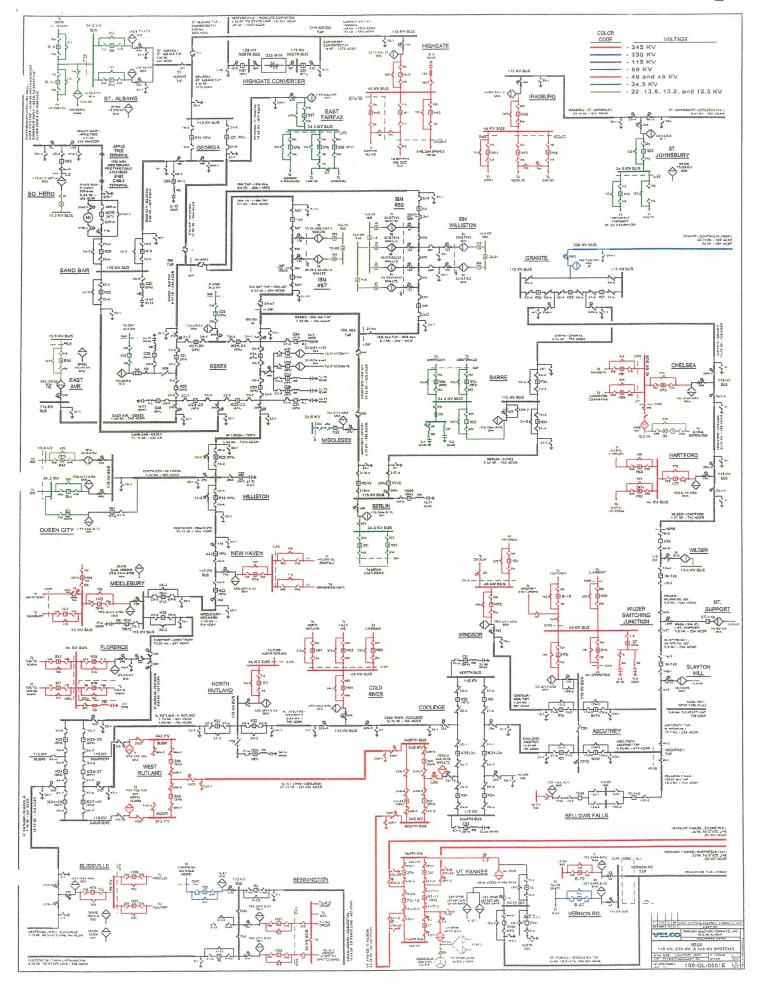
Examination of the exhibit shows that, usually, the project reduces overall losses in New England. The project reduced losses in New England as a whole in 22 out of 24 cases. With respect to Vermont-only losses, the project reduced Vermont losses in 7 cases, had no Vermont loss impact in 2 cases, and had a small negative impact in 15 cases. The change in overall system losses varied from a 0.39 MW reduction in overall system losses to a 0.08 MW increase in overall system losses while the impact on Vermont losses varied between a 0.15 MW reduction to a 0.12 MW increase. Due to the uncertainty in forecasting future load levels, system power transfers, generation dispatch and project completion dates, an annual MW-hr loss impact cannot be estimated with accuracy. Q12. In summary what are your conclusions regarding the WEC Coventry project's impacts on the performance of the local network? The WEC Coventry project has the following impacts on the local transmission and subtransmission system: - The project has little to no impact on local thermal performance. A small adverse impact on the CVPS Lowell – Johnson 34.5 kV line, and Lowell transformer, will be removed once the VELCO Northern Loop project is in-

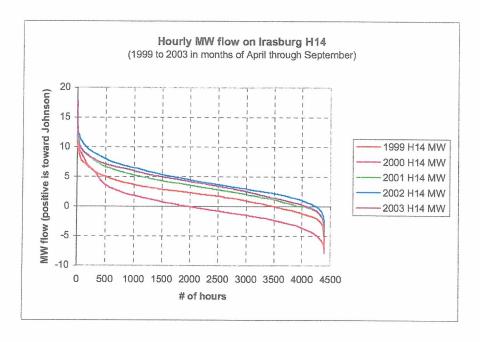
Pre-filed Testimony of Dean L. LaForest In re WEC, VELCO, VEC, CZN'S §248 Petition for Certificate of Public Good February 12, 2004 Page 15 of 15

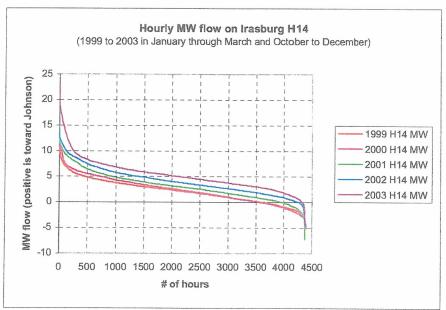
1		- The project will have no adverse impact on local stability performance provided
2		that the project's relaying addresses out of step / loss of synchronism concerns;
3		- The project's impact on local short circuit duty was minimal and resulted in no
4		additional equipment requiring replacement;
5		- The project's impact on New England losses is minimal, but generally
6		beneficial. Its impact on Vermont losses is again minimal, and varies from a small
7		adverse to small beneficial impact depending on system conditions and
8		configuration.
9		
10	Q13.	Does this conclude your testimony?
11	A13.	Yes.

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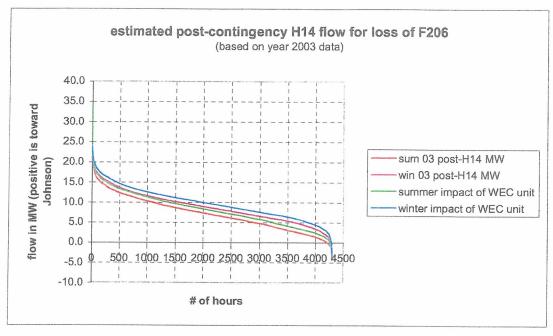


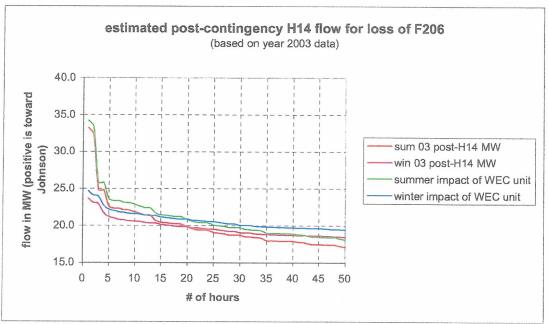






1/27/2004 DLL





1/28/2004 DLL

		WEC unit	off	off	off	off	4	4	4	4	off	off	off	off	4	4	4	4
		load level	peak	peak	peak	peak	peak	peak	peak	peak	peak	peak	peak	peak	peak	peak	peak	peak
		NL	out	out	out	out	out	out	out	out	in	In	In	In	In	In	In	In
		HG	210	210	off	off	210	210	off	off	210	210	off	off	210	210	off	off
		McNeil	50	off	50	off	50	off	50	off	50	off	50	off	50	off	50	off
line section	Owner	summer rating	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	
Lowell 46/34.5 kV transformer	CVPS	20	< 90%	< 90%	118.2%	103.9%	< 90%	< 90%	121.8%	107.5%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%
Lowel - Johnson 34.5 kV	CVPS	22	< 90%	< 90%	113.0%	98.4%	< 90%	< 90%	116.3%	101.7%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%
Danville - Marshfield 34.5 kV	GMP	21	< 90%	< 90%	110.1%	90.6%	< 90%	< 90%	110.2%	90.6%	< 90%	< 90%	< 90%	122.6%	< 90%	< 90%	< 90%	122.2%
TO ARTICLE CONTINUES OF THE PROPERTY OF THE PR	-																	10000
		WEC unit	off	off	off	off	4	4	4	4	off	off	off	off	4	4	4	1 4
		load level	% of peak	% of peak	% of peak	% of peak	% of peak	% of peak	% of peak?	6 of peak					% of neak	% of neak	1% of peak	% of neak
		NL.	out	out	out	out	out	out	out	out	in	In	In	In	In	In	In	in
		HG	210	210	off	off	210	210	off	off	210	210	off	off	210	210	off	off
		McNeil	50	off	50	off	50	off	50	off	50	off	50	off	50	off	50	
line section	Owner	summer rating	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	max load	The same of the sa
Lowell 46/34.5 kV transformer	CVPS	20	< 90%	< 90%	117.3%	128.8%	< 90%	< 90%	120.9%	132.3%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%
Lowel - Johnson 34.5 kV	CVPS	22	< 90%	< 90%	110.9%	124.7%	< 90%	< 90%	114.3%	128%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%
Danville - Marshfield 34.5 kV	GMP	21	< 90%	< 90%	115.3%	128.5%	< 90%	< 90%	115.3%	128.6%	< 90%	< 90%	113.2%	107.2%	< 90%	< 90%	113.1%	106.8%
Granite - Barre 115 kV	VELCO	227	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	< 90%	94.6%	< 90%	< 90%	< 90%	94.2%
		WEC unit	off		off	off	4	4	4	4	off	off	off	off	4	4	4	4
		load level	% of peak	% of peak	% of peak	% of peak	3% of peak	8% of peak	% of peaks	% of peak	% of peak	% of peak	% of peaks	% of peak	% of peak	% of peak?	8% of peak	8% of peak
			70 co. percent	70	To at product													
		NL	out	out	out	out	out	out	out	out	In	ln	In	In	In	ln	in	In
		NL HG	ошt 210	out 210	out off	out off	out 210	out 210	out off	The state of the s	in 210			-		In 210	In off	-
		NL	out	out	out	out	out 210	out	out	out	In	In	In	In	In			off
line section	Owner	NL HG McNeil summer rating	out 210 50 max load	out 210	out off	out off off	out 210	out 210 off	out off 50	out off off	1n 210 50	In 210 off	In off 50	In off off	In 210 50	210 off	off	off off
Lowell 46/34.5 kV transformer	CVPS	NL HG McNeil summer rating 20	out 210 50 max load < 90%	out 210 off	out off 50 max load 107.6%	out off off max load 119.3%	out 210 50 max load < 90%	out 210 off	out off 50	out off off	1n 210 50	In 210 off	In off 50	In off off	In 210 50	210 off	off 50	off off
Lowell 46/34.5 kV transformer Lowel - Johnson 34.5 kV	CVPS CVPS	NL HG McNeil summer rating 20 22	out 210 50 max load < 90% < 90%	out 210 off max load	out off 50 max load	out off off max load 119.3% 112.6%	out 210 50 max load < 90%	out 210 off max load	out off 50 max load	out off off max load	In 210 50 max load	In 210 off max load	In off 50 max load	In off off max load	210 50 max load	210 off max load	off 50 max load	off off max load
Lowell 46/34.5 kV transformer	CVPS	NL HG McNeil summer rating 20	out 210 50 max load < 90%	out 210 off max load < 90%	out off 50 max load 107.6%	out off off max load 119.3%	out 210 50 max load < 90%	out 210 off max load < 90%	out off 50 max load 111.2%	out off off max load 122.9%	210 50 max load < 90%	In 210 off max load < 90%	In off 50 max load < 90%	in off off max load < 90%	In 210 50 max load < 90%	210 off max load < 90%	off 50 max load < 90%	off off max load < 90%

1/28/2004

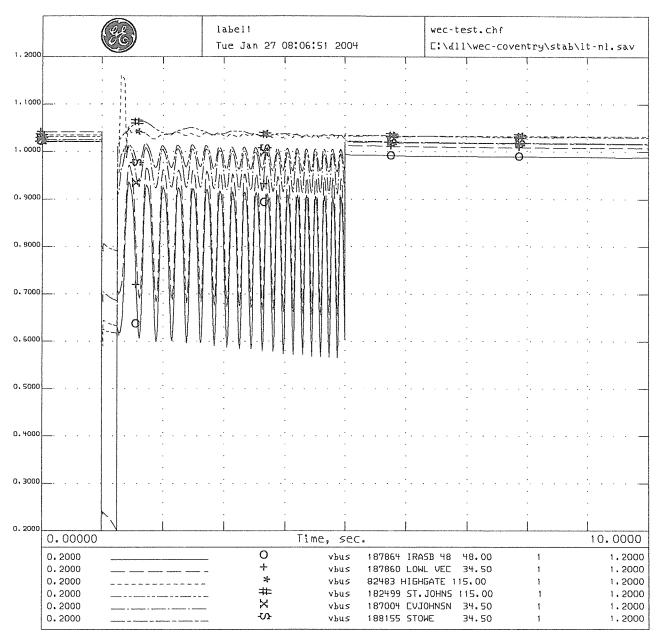
Exhibit VELCO_DLL-7

COVENTRY LANDFILL GENERATOR SHORT CIRCUIT IMPACT

(all values shown in amps)

		Pre-Projec	ŧ		Post Projec	:t	Delta			
Substation	3LG	2LG	SLG	3LG	2LG	SLG	3LG	2LG	SLG	
Irasburg 115kV	2937	2727	2320	2996	2793	2407	59	66	87	
Irasburg 48kV	3990	4094	4119	4224	4360	4427	234	266	308	
Lowell 48kV	2484	2453	2260	2540	2500	2291	56	47	31	
Lowell 34.5kV	2959	2994	2830	3007	3032	2858	48	38	28	
St. Johnsbury 115kV	4946	4740	4295	4966	4761	4311	20	21	16	
St. Johnsbury 34.5kV	5698	6706	6990	5697	6704	6989	-1	-2	-1	
Highgate 115kV	4036	4537	4694	4050	4548	4706	14	11	12	
Highgate 48kV	4370	4881	5082	4370	4880	5080	0	-1	-2	
Converter South	4033	4588	4737	4047	4600	4749	14	12	12	

- 1) Coventry Landfill Generator Data Estimated as follows: X"d = 0.09, X'd = 0.155, Xd = 1.1 Per Unit on 3.6 MVA
- 2) Coventry Line and GSU data supplied by EPRO.
- 3) All system generators in service.
- 4) All shunt loads to ground except gen. internal impedances, transformer grounding paths, and shunt loads not modeled.
- 5) Generator Subtransient Reactance used.
- 6) Plattsburg PAR bypassed.
- 7) Sand Bar OMS Out of Service.
- 8) Northern Loop is included in the model.



2006 light load case from 2000 library - modified by VELEO May 2002 added detailed VT model - AES Londonderry off-line - high North-South

WEE Coventry modeled on-line

15 cycle, 3 phase fault placed at Irasburg 115 kV station Assumed on line to St. Johnsbury with breaker failure at Irasburg Results in trip of both Irasbugh 115 kV breakers, the Irasburg 115/46 auto and the Irasburg - St. Johnsbury line

WEC Conventry unstable - tripped at 5 seconds in the simulation

	Highgate import (MW)	McNeil (MW)	Northern Loop	WEC project *	NE losses w/o VT (MW)	VT losses (MW)	WEC project *	NE losses w/o VT (MW)	VT losses (MW)	change in NE losses (MW)	change in VT losses (MW)	overall change in losses (MW)
peak	210	50	out	off	760.27	58.35	on	760.08	58.34	0.19	0.01	0.2
peak	210	50	in	off	759.81	60.4	on	759.65	60.47	0.16	-0.07	0.09
peak	0	50	out	off	767.75	60.03	on	767.47	60.09	0.28	-0.06	0.22
peak	0	50	ín	off	768.61	57.59	on	768.44	57.58	0.17	0.01	0.18
peak	210	0	out	off	760.19	62.89	on	759.99	62.9	0.2	-0.01	0.19
peak	210	0	in	off	759.81	64.87	on	759.64	64.92	0.17	-0.05	0.12
peak	0	0	out	off	764.62	67.18	on	764.35	67.25	0.27	-0.07	0.2
peak	0	0	in	off	765.28	62.53	on	765.04	62.38	0.24	0.15	0.39
90% of peak	210	50	out	off	761.76	52.26	on	761.6	52.24	0.16	0.02	0.18
90% of peak	210	50	in	off	761.29	53.38	on	761.15	53.47	0.14	-0.09	0.05
90% of peak	0	50	out	off	764.19	50.67	on	763.94	50.74	0.25	-0.07	0.18
90% of peak	0	50	in	off	764.69	47.64	on	764.46	47.54	0.23	0.1	0.33
90% of peak	210	0	out	off	761.34	54.75	on	761.15	54.75	0.19	0	0.19
90% of peak	210	0	in	off	760.92	56.38	on	760.76	56.45	0.16	-0.07	0.09
90% of peak	0	0	out	off	764.94	56.98	on	764.67	57.05	0.27	-0.07	0.2
90% of peak	0	0	in	off	765.56	53.16	on	765.32	53.04	0.24	0.12	0.36
78% of peak	210	50	out	off	623	43.68	on	622.96	43.68	0.04	0	0.04
78% of peak	210	50	in	off	622.99	44.02	on	622.95	44.14	0.04	-0.12	-0.08
78% of peak	0	50	out	off	624	36.62	on	623.88	36.72	0.12	-0.1	0.02
78% of peak	0	50	in	off	624.31	34.37	on	624.2	34.33	0.11	0.04	0.15
78% of peak	210	0	out	off	623.42	44.27	on	623.3	44.28	0.12	-0.01	0.11
78% of peak	210	0	in	off	623.32	45.22	on	623.26	45.33	0.06	-0.11	-0.05
78% of peak	0	0	out	off	624.28	42.01	on	624.14	42.13	0.14	-0.12	0.02
78% of peak	0	0	in	off	624.69	38.92	on	624.56	38.86	0.13	0.06	0.19

^{*} note when the WEC project is on, it was modeled at 4 MW dispatched against generation in southeastern New England postive incremental losses indicate a loss reduction while negative incremental losses (shaded cells) indicate a loss increase

1/28/2004



Mitt Romney Governor

Kerry Healey Lieutenant Governor

Beth Lindstrom

Director, Office of Consumer Affairs
and Business Regulation

David L. O'Connor Commissioner

COMMONWEALTH OF MASSACHUSETTS: OFFICE OF CONSUMER AFFAIRS AND BUSINESS REGULATION DIVISION OF ENERGY RESOURCES

100 Cambridge Street, Suite 1020 BOSTON, MA 02114

Internet: www.Mass.Gov/DOER Email: Energy@State.MA.US

TELEPHONE 617-727-4732

FACSIMILE 617-727-0030 617-727-0093

February 18, 2005

Mr. Avram Patt
Genera Manager
Washington Electric Cooperative, Inc.
P. O. Box 8
East Montpelier, VT 05651

RE: RPS Eligibility Decision

Coventry Landfill Gas to Energy Facility [LG-1034-05]

Dear Mr. Patt,

On behalf of the Division of Energy Resources (the Division), I am pleased to inform you that your Application for Statement of Qualification pursuant to the Massachusetts Renewable Energy Portfolio Standard (RPS) Regulations, 225 CMR 14.00, is hereby approved. The Division finds that the Generation Unit meets the requirements for eligibility as a New Renewable Generation Unit pursuant to 225 CMR 14.05.

Each Massachusetts New Renewable Generation Unit is assigned a unique Massachusetts RPS Identification Number (MA RPS ID#). The MA RPS ID # stated on the Statement of Qualification must be included in all correspondence with the Division. Coventry Landfill Gas to Energy Facility's MA RPS ID# is: LG-1034-05.

COMMONWEALTH OF MASSACHUSETTS OFFICE OF CONSUMER AFFAIRS AND BUSINESS REGULATION DIVISION OF ENERGY RESOURCES

Statement of Qualification

Pursuant to the Renewable Energy Portfolio Standard 225 CMR 14.00

This Statement of Qualification, provided by the Massachusetts Division of Energy Resources, signifies that the Generation Unit identified below meets the requirements for eligibility as a New Renewable Generation Unit, pursuant to the Renewable Energy Portfolio Standard 225 CMR 14.05, as of the approval date of the Application for Statement of Qualification, this 18th day of February 2005.

Authorized Representative's Name and Address:

Mr. Avram Patt Genera Manager

Washington Electric Cooperative, Inc.

P. O. Box 8

East Montpelier, VT 05651

Name of Generation Unit:

Coventry Landfill Gas to Energy Facility

Date: February 18, 2005

ISO-NE Generation Unit Asset Identification Number or NE-GIS Identification Number:

MSS 10801

This New Renewable Generation Unit is assigned a unique Massachusetts RPS Identification Number. Please include MA RPS ID #s on all correspondence with the Division.

MA RPS ID #: <u>LG-1034-05</u>

Pursuant to 225 CMR 14.06, the Owner or Operator of the New Renewable Generation Unit is responsible for notifying the Division of any change in eligibility status, and the Division may suspend or revoke this Statement of Qualification if the Owner or Operator of a New Renewable Generation Unit fails to comply with 225 CMR 14.00.

Robert Sydney General Counsel

Division of Energy Resources



Deval L. Patrick

Timothy P. Murray Lieutenant Governor

Governor

Ian A. Bowles Secretary, Executive Office of Energy and Environmental Affairs

> Philip Giudice Commissioner

COMMONWEALTH OF MASSACHUSETTS **DIVISION OF ENERGY RESOURCES**

> TELEPHONE 617-727-4732

FACSIMILE 617-727-0030 617-727-0093

July 11, 2007

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

100 CAMBRIDGE ST., SUITE 1020 BOSTON, MA 02114 Internet: www.Mass.Gov/DOER Email: Energy@State.MA.US

Mr. Avram Patt General Manager Washington Electric Cooperative, Inc. P. O. Box 8 East Montpelier, VT 05651

RE: **Amended Statement of Qualification** Coventry Landfill Gas to Energy Facility [LG-1034-05]

Dear Mr. Patt,

On behalf of the Division of Energy Resources (the Division), I am pleased to inform you that your request to amend the existing Statement of Qualification (SQ) pursuant to the Massachusetts Renewable Energy Portfolio Standard (RPS) Regulations, 225 CMR 14.00, is hereby approved. The Division finds that the Generation Unit, as expanded, continues to meet the requirements for eligibility as a New Renewable Generation Unit pursuant to the RPS regulation at 225 CMR 14.05.

Accordingly, the SQ for the Coventry Landfill Gas to Energy Facility has been amended to reflect the addition of 1.6 MW in capacity and the new NEPOOL GIS number that was assigned to the addition.

Sincerely.

General Counsel

Encl: Statement of Qualification

COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS DIVISION OF ENERGY RESOURCES

Statement of Qualification - Amended

Pursuant to the Renewable Energy Portfolio Standard 225 CMR 14.00

This Statement of Qualification, provided by the Massachusetts Division of Energy Resources, signifies that the Generation Unit identified below meets the requirements for eligibility as a New Renewable Generation Unit, pursuant to the Renewable Energy Portfolio Standard 225 CMR 14.05, as of the approval date of the Application for Statement of Qualification, this 18th day of February 2005, and as amended this 11th day of July 2007.

Name of Generation	Unit:
--------------------	-------

Coventry Landfill Gas to Energy Facility

Date: 2-11-07

Coventry, VT 6.4 MW

Authorized Representative's Name and Address:

Mr. Avram Patt General Manager

Washington Electric Cooperative, Inc.

P. O. Box 8

East Montpelier, VT 05651

ISO-NE Generation Unit Asset Identification Numbers or NEPOOL-GIS Identification Numbers:

MSS 10801 (4.8 MW) and MSS 12323 (1.6 MW)

This New Renewable Generation Unit is assigned a unique Massachusetts RPS Identification Number. Please include MA RPS ID #s on all correspondence with the Division.

MA RPS ID #: <u>LG-1034-05</u>

Pursuant to 225 CMR 14.06, the Owner or Operator of the New Renewable Generation Unit is responsible for notifying the Division of any change in eligibility status, and the Division may suspend or revoke this Statement of Qualification if the Owner or Operator of a New Renewable Generation Unit fails to comply with 225 CMR 14.00.

Philip Giudice Commissioner

Division of Energy Resources

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS **PUBLIC UTILITIES COMMISSION**

IN RE: APPLICATION FOR STANDARD CERTIFICATION DOCKET NO. 3884-A AS ELIGIBLE RENEWABLE ENERGY RESOURCE FILED BY WASHINGTON ELECTRIC COOPERATIVE COVENTRY LANDFILL GAS TO ENERY PROJECT UNITS 1-3

ORDER

WHEREAS, Effective January 1, 2006, the Rhode Island Public Utilities Commission ("Commission") adopted Rules and Regulations Governing the Implementation of a Renewable Energy Standard (RES Regulations) including requirements for applicants seeking certification as an Eligible Renewable Energy Resource under the RES Regulations¹ pursuant to the Renewable Energy Act, Section 39-26-1 et. seq. of the General Laws of Rhode Island; and

WHEREAS, On October 12, 2007, Washington Electric Cooperative ("Company", Authorized Representative: Avram Patt, General Manager, PO Box 8, East Montpelier, VT 05651, 802-223-5245, Avram.Patt@washingtonelectric.coop) filed with the Commission an application seeking certification for its Washington Electric Cooperative Coventry Landfill Gas to Energy Project (Units 1-3) Generation Unit, a 4.8 MW landfill methane gas to energy Generation Unit located in Coventry, Vermont, as an eligible New Renewable Energy Resource under the State of Rhode Island RES Regulations; and

¹ State of Rhode Island and Providence Plantations Public Utilities Commission Rules and Regulations Governing the Implementation of a Renewable Energy Standard – Date of Public Notice: September 23, 2005, Date of Public Hearing: October 12, 2005, Effective Date: January 1, 2006.

WHEREAS, Pursuant to Section 6.0 and other relevant Sections of the RES Regulations, a thirty (30) day period for public comment was provided during which time, no such comments were received, and

WHEREAS, After examination, the Commission is of the opinion that the application is proper, reasonable and in compliance with the RES Regulations, and hereby grants the Company certification as an eligible renewable energy resource pursuant to the Renewable Energy Act, Section 39-26-1 et. seq. of the General Laws of Rhode Island; and

WHEREAS, The Commission's determination in this docket is based on the information submitted by the Company, and the Commission may reverse its ruling or revoke the Applicant's certification if any material information provided by the Applicant proves to be false or misleading.

Accordingly, it is

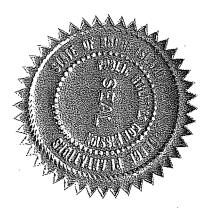
(19194) ORDERED:

- 1) That the Wahington Electric Cooperative Coventry Landfill Gas to Energy Project (Units 1-3) Generation Unit, meets the requirements for eligibility as a New, Eligible Biomass Renewable Energy Resource with its 4.8 MW, Grid-Connected Generation Unit having a Commercial Operation Date of July 1, 2005 and located within the NEPOOL Control Area in Coventry, Vermont.
- 2) That the Generation Unit's NEPOOL-GIS Identification Number is MSS10801.
- 3) That the Company's Generation Unit as identified above is hereby assigned unique certification number RI-3884A-N08.

- 4) That, although the Commission will rely upon the NEPOOL GIS for verification of production of energy from the Company's Generation Unit certified as eligible in this Order, the Company will provide information and access as necessary to the Commission, or persons acting at its behest, to conduct audits or site visits to assist in verification of continued eligibility for and compliance with RI RES Certification at any time at the Commission's discretion. Such continuing verification shall include an annual affidavit and supporting documentation of use of eligible fuels.
- 5) That the Company shall notify the Commission in the event of a change in the facility's eligibility status.

DATED AND EFFECTIVE AT WARWICK, RHODE ISLAND ON JANUARY 31, 2008 PURSUANT TO AN OPEN MEETING DECISION. WRITTEN ORDER ISSUED FEBRUARY 1, 2008.

PUBLIC UTILITIES COMMISSION



*Elia Germani, Chairman

Robert B. Holbrook, Commissioner

Mary E. Bray, Commissioner

*Chairman Germani concurs but is unavailable.

STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

IN RE: APPLICATION BY WASHINGTON ELECTRIC COOPERATIVE, INC., FOR CLASS I RENEWABLE ENERGY SOURCE ELIGIBILITY, CLASS III.

AFFIDAVIT OF AVRAM PATT

- I, Avram Patt, being first duly sworn, depose and say that:
 - I am the General Manager for Washington Electric Cooperative, Inc.
 ("WEC"), since 1997, which its principal place of business located in East Montpelier, County of Washington, State of Vermont.
 - 2. I am also long time resident of Washington County, State of Vermont.
 - 3. WEC owns the Coventry Landfill Gas to Energy Facility ("Facility"), located in Coventry, Vermont. The Facility is operated by WEC's wholly owned subsidiary, the Coventry Clean Energy Corporation, Inc. ("CCEC").
 - 4. I have reviewed the application for Renewable Energy Source Eligibility as set forth in Exhibit 1, attached hereto. Based upon my own knowledge, information, and belief, the data and information contained in the application are accurate.
 - This affidavit is based upon my own knowledge, information and belief.
 To the extent it is based upon information and belief, I believe these facts to be true.

Dated at Montpelier, Vermont, this / day of January, 2012.

Avram Patt, General Manager

Washington Electric Cooperative, Inc.

State of Vermont Washington County, SS.

Subscribed and sworn to before me, on this 10th day of January, 2011.

Cleborah Brown

Notary Public

My Commission Expires 2/10/15